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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/839,532	04/20/2001	Chiaki Hashimoto	M1717-20	2134

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EXAMINER

CHANG, ERIC

ART UNIT	PAPER NUMBER
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2116

DATE MAILED: 09/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/839,532	Applicant(s) HASHIMOTO, CHIAKI	
	Examiner Eric Chang	Art Unit 2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-11 are pending.

Specification

2. The abstract of the disclosure is objected to because it contains figure reference numbers. Correction is required. See MPEP § 608.01(b).

Claim Rejections - 35 USC § 102

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
4. Claims 1, 2 and 4 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by U.S. Patent 5,003,192 to Beigel.
5. As to claim 1, Beigel discloses a power on/off circuit apparatus, comprising:
 - [a] a power on/off circuit for controlling an on/off of power supply to electronic components from an external power source [FIG. 1, elements 15-20, and col. 1, lines 42-60];
 - [b] a microcomputer for controlling said power on/off circuit based on an operation input of a power switch [FIG. 3, element 54, and col. 5, lines 20-24];
 - [c] a reset circuit for giving a reset signal to a reset terminal of the microcomputer when a power is supplied to said microcomputer [FIG. 3, element 45, and col. 4, lines 34-54]; and

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[d] a non-volatile memory for storing a power on/off information just before said power switch is operated, said power switch being connected to said reset terminal [FIG. 3, element 50, and col. 4, lines 3-8].

Beigel teaches a power on/off circuit apparatus comprising a microcomputer logic unit that receives control input from a power switch and a reset circuit that indicates when power supply is available. The logic unit stores the state of the switch in the event of power interruption, and accordingly controls the power supply to electronic components by means of a power on/off circuit comprising a photosensitive switch controlled by an LED, substantially as claimed.

6. As to claim 2, Beigel discloses that when said power switch is operated:

[a] said microcomputer reads a power on/off information of said non-volatile memory so as to determine a power on/off state just before the power switch is operated [col. 5, lines 26-30];

[b] writes the power-on information to said non-volatile memory while making a power-on operation if the microcomputer is in a power-off state [col. 5, lines 31-35]; or

[c] writes the power-off information to said non-volatile memory while making a power-off operation if the microcomputer is in a power-on state [col. 5, lines 31-35].

7. As to claim 4, Beigel discloses that when said power switch is operated, a reset terminal of said microcomputer is connected to a GND, and said microcomputer is reset so as to resolve a hang-up of the microcomputer [col. 5, lines 1-10].

Claim Rejections - 35 USC § 103

8. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

9. Claims 3 and 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,003,192 to Beigel, in view of U.S. Patent 6,625,739 to Kobayashi.

10. As to claim 3, Beigel discloses a power on/off apparatus including a non-volatile memory for storing the state of the power switch prior to the operation of said power switch. Beigel teaches all of the limitations of the claim, but does not teach a key scan of a key matrix is used to control the power on/off circuit.

Kobayashi teaches that a key scan of a key matrix of keys other than a power switch is used to control the power supplied to a computer [col. 2, lines 25-51].

At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the key matrix means as taught by Kobayashi. One of ordinary skill in the art would have been motivated to do so that a plurality of keys other than the power switch to control the power state of the associate electrical equipment.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of controlling the power supplied from a power source to electrical components. Moreover, the key matrix means taught by Kobayashi would improve the flexibility of Beigel because it allowed the power control of the electrical components to be forcibly enforced by means other than the power switch.

11. As to claim 5, Kobayashi discloses the key matrix means causes the power on/off circuit to cancel a power supply to the electronic components even when the electronic components are operating in a power saving mode, said [col. 1, lines 23-30, col. 2, lines 1-8, and col. 3, lines 21-47], substantially as claimed.

12. As to claim 6, Beigel discloses an electronic device comprising a power on/off circuit apparatus, comprising: a power on/off circuit for controlling an on/off of power supply to electronic components from an external power source [FIG. 1, elements 15-20, and col. 1, lines 42-60]; a microcomputer for controlling said power on/off circuit based on an operation input of a power switch [FIG. 3, element 54, and col. 5, lines 20-24]; a reset circuit for giving a reset signal to a reset terminal of the microcomputer when a power is supplied to said microcomputer [FIG. 3, element 45, and col. 4, lines 34-54]; and a non-volatile memory for storing a power on/off information just before said power switch is operated, said power switch being connected to said reset terminal [FIG. 3, element 50, and col. 4, lines 3-8]. In addition, Kobayashi teaches that a key scan of a key matrix of keys other than a power switch is used to control the power supplied to a computer [col. 2, lines 25-51], substantially as claimed.

13. As to claim 7, Kobayashi discloses that the power on/off circuit may be connected to a hard drive [FIG. 1, element 31] or CD-ROM drive [FIG. 1, element 32], each comprising a servo circuit. In addition, Kobayashi discloses that the power on/off circuit may be connected to an AV decoder circuit [FIG. 1, element 21], substantially as claimed.

14. As to claim 8, Beigel discloses a power on/off circuit apparatus, comprising: a power on/off circuit for controlling an on/off of power supply to electronic components from an external power source [FIG. 1, elements 15-20, and col. 1, lines 42-60]; a microcomputer for controlling said power on/off circuit based on an operation input of a power switch [FIG. 3, element 54, and col. 5, lines 20-24]; a reset circuit for giving a reset signal to a reset terminal of the microcomputer when a power is supplied to said microcomputer [FIG. 3, element 45, and col. 4, lines 34-54]; and a non-volatile memory for storing a power on/off information just before said power switch is operated, said power switch being connected to said reset terminal [FIG. 3, element 50, and col. 4, lines 3-8]. In addition, Kobayashi teaches the electronic components may comprise servo circuits in a hard drive [FIG. 1, element 31] or CD-ROM drive [FIG. 1, element 32] and an AV decoder circuit [FIG. 1, element 21], substantially as claimed.

15. Claims 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent 5,003,192 to Beigel, in view of U.S. Patent 6,625,739 to Kobayashi, and in further view of U.S. Patent 5,077,551 to Saitou.

16. As to claims 9-11, Beigel and Kobayashi teach all of the limitations of the claim, including a power on/off apparatus comprising a power on/off circuit, a microcomputer, a reset circuit, a non-volatile memory, a power circuit connected to an AC power source, a key matrix, and electronic components such as servo and AV decoder circuits, but do not teach another

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power on/off circuit connected to a power circuit for controlling the supply of power of a different level to other electronic components.

Saitou teaches that a switch [30] controls the supply of power to a display panel [16] by turning off the supply of power to said display panel regardless of the power level supplied to the other electronic components in a portable computer [col. 1, lines 46-61]. Thus, Saitou teaches a portable computer similar to that of Kobayashi. Saitou further teaches that different components in the portable computer may receive different levels of power based on their corresponding power on/off circuits.

At the time that the invention was made, it would have been obvious to a person of ordinary skill in the art to employ the display panel power control means as taught by Saitou. One of ordinary skill in the art would have been motivated to do so that power may be conserved in the portable computer system.

It would have been obvious to one of ordinary skill in the art to combine the teachings of the cited references because they are both directed to the problem of controlling power to various components within an electronic device by switches other than the main power switch. Moreover, the display panel power control means taught by Saitou would improve the durability of Beigel and Kobayashi because it would protect the display from being adversely affected by heat when the display is closed [col. 1, lines 30-37].

Response to Arguments

17. Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

18. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

19. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Eric Chang whose telephone number is (703) 305-4612. The examiner can normally be reached on M-F 9:00-5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (703) 308-1159. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.


LYNNE H. BROWNE
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